

## Lab Reports in a Lab Composition Book

Components to be included in the lab book

1. Title and date
2. Purpose
  - A statement as to the objective of the lab, what does one hope to gain from conducting this particular investigation? What are you looking for in the experiment?
3. Procedures
  - A brief yet clear explanation as to how the experiment was carried out
  - Identify all variables being investigated
  - Sketches of apparatus should be included, computer produced diagrams are desired
4. Data
  - Consists of only values measured directly with the apparatus
  - Should be displayed in neat tables clearly labeled with appropriate units
  - A separate chart should be created and clearly labeled “calculated data” for any calculated numbers which used the collected data in the calculations
4. Analysis
  - This section includes all graphs which are clearly labeled
  - Graphs should contain proper regressions indicating the relationship between the variables
  - Graphs should be computer generated
  - Accuracy of your results should be contained in the section
    - For graphs the root mean square error should be reported or another acceptable analysis statistic
    - If applicable percent error and or percent difference should be indicated (with sample calculations included)
  - If applicable questions from the teacher should be answered in this section, the question and or paraphrasing of the question should precede the answer
5. Conclusion/Summary
  - The purpose statement should be addressed/answered
  - Relationships between variable should be clearly stated both a verbal description and mathematical model (equation)
  - Discuss possible extensions of the experiment and or questions that the experiment has generated